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United States Government

Department of Energy

memorandum

DATE: July 18, 2002

REPLY TO
ATTN OF: EM-22 (Helen Belencan, 301-903-7174)

SUBJECT: Low-Level Waste Disposal Cost Study: Implementing the Results

TO: Distribution

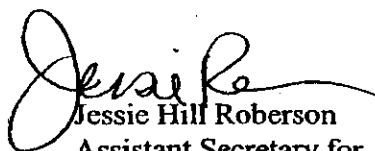
Attached is a copy of our recently completed Report to Congress on the life cycle cost of low-level waste (LLW) disposal. The report highlights three key findings:

- (1) on-site Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cells are cost effective;
- (2) commercial disposal facilities offer the lowest disposal cost for some waste and should be used to the maximum extent possible; and
- (3) all decisions for choosing LLW disposal facilities should be based upon the full "cradle to grave" cost of managing the waste stream, not just the fee charged by the disposal facility.

To implement these results, I am directing the following actions be taken:

1. Before any existing CERCLA cell is expanded or a new facility built, a life cycle cost analysis must be completed using the cost information attached to this memo and provided in the attached report. The documentation of this analysis should be presented as part of the decision to proceed with expansion or new construction.
2. To facilitate the use of licensed, commercial disposal facilities, Department of Energy (DOE) Waste Management Order 435.1 will be changed to remove the requirement for an exemption to use non-DOE disposal facilities. Instead, each Field Office Manager must ensure that disposal decisions are made based on technical acceptability, schedule, and cost benefit.
3. Each field office will develop the mechanisms necessary to establish that their LLW disposal decisions include the best estimate of full "cradle to grave" costs and analysis of alternatives. These costs must include waste preparation, packaging, transportation, and disposal costs (see Attachment 2). Documentation of these analyses will be made available to support future reviews of our disposal decisions and should also include other factors used to inform disposal decisions, such as schedule.

By implementing these actions, I believe we can demonstrate our commitment to safe, cost-effective disposal of low-level waste. If you have any questions, please contact me at (202) 586-7709 or Ms. Patrice M. Bubar, Associate Deputy Assistant Secretary, Office of Integration and Disposition, at (202) 586-5151.



Jessie Hill Roberson
Assistant Secretary for
Environmental Management

Attachment

Distribution:

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REPORT TO CONGRESS

**THE COST OF WASTE DISPOSAL:
LIFE CYCLE COST ANALYSIS OF DISPOSAL OF
DEPARTMENT OF ENERGY LOW-LEVEL
RADIOACTIVE WASTE AT FEDERAL AND
COMMERCIAL FACILITIES**

July 2002

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Office of Environmental Management



Attachment 2. Life Cycle Costs for Disposal of DOE LLW

Disposal Site	Life Cycle Cost (\$/m3)
DOE CERCLA Disposal Facilities:	
Hanford ERDF	\$29
Oak Ridge EMWMF	\$140
INEEL ICDF	\$160
Fernald OSDF	\$190
DOE Non-CERCLA Disposal Facilities:	
Savannah River Site Trenches	\$130
Nevada Test Site	\$320
INEEL RWMC	\$700
Hanford LLBG	\$2,000
Savannah River Site Vaults	\$2,100
Commercial Disposal Facilities:	
Envirocare (soil)	\$180
Envirocare (debris)	\$520
Barnwell	\$14,000
US Ecology	\$2,500

Notes: (1) To gain a true cost comparison of disposal sites, generator costs including waste preparation, packaging, and transportation must also be considered, as these vary depending on the disposal site. (2) These costs do not include surcharges for remote handling, shielding, MLLW, etc. (3) The values shown for Barnwell and US Ecology are their nominal average prices for LLW and do not include curie or dose rate surcharges.